

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
22 April 2004 (22.04.2004)

PCT

(10) International Publication Number
WO 2004/033064 A3

(51) International Patent Classification⁷: **B67D 5/16**

(21) International Application Number:
PCT/US2003/032382

(22) International Filing Date: 10 October 2003 (10.10.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/417,720 10 October 2002 (10.10.2002) US

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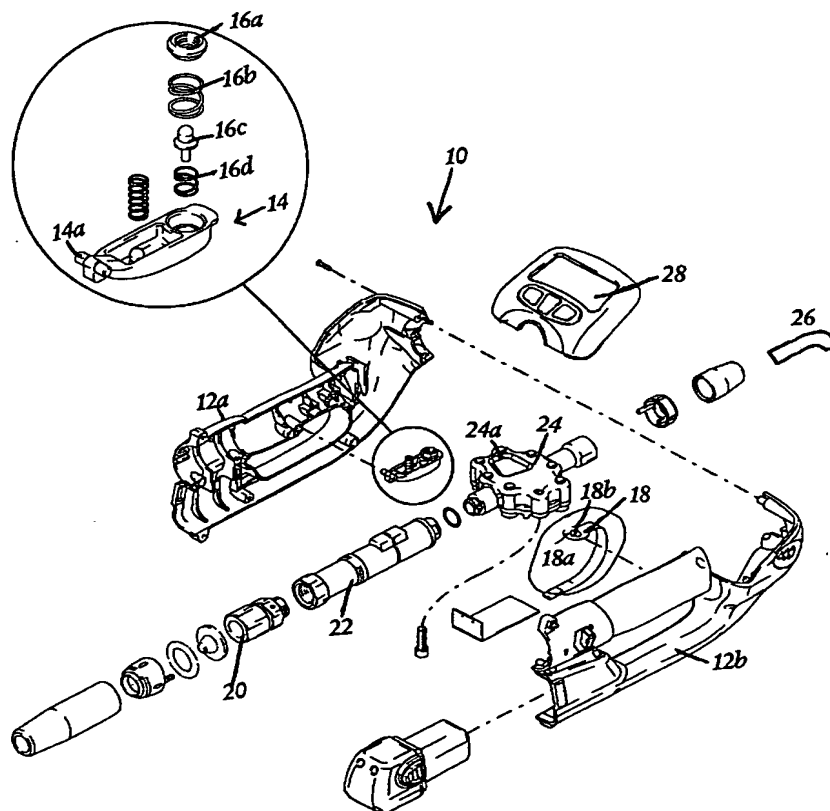
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(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: MEMBRANE AND SOLENOID ACTUATED VALVE FOR DISPENSING



(57) Abstract: The invention replaces mechanical actuation of the valve (22) in lubricant dispense meters (10) to provide a software driven method of controlling the dispense of fluids. The design utilizes either a pressure sensitive membrane switch or a multi-position membrane switch (18) in conjunction with either a multistage solenoid actuated valve, a proportional solenoid actuated valve or an on/off solenoid actuated valve (22) to provide operator or programmed control of lubricant dispense frequency and flow rate via the meter's microprocessor.



Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,
SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM,
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(88) Date of publication of the international search report:
22 July 2004

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/32382

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B67D 5/16
US CL : 222/71, 504

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 222/71, 504

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,941,418 A (BOX et al.) 24 August 1999 (24.08.1999), See entire document.	1 and 2
A	US, 2,585,821 A (MUELLER) 12 February 1952 (12.02.1952), See entire document.	1 and 2
A	US 5,257,720 A (WULE et al.) 02 November 1993 (02.11.1993), See entire document.	1 and 2
A	US 4,955,507 A (KIRSCHNER et al.) 11 September 1990 (11.09.1990), See entire document.	1 and 2

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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Date of the actual completion of the international search

19 April 2004 (19.04.2004)

Date of mailing of the international search report

24 MAY 2004

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